Testimony of Peter Nickerson, Ph.D.
The Senate Committee on Commerce, Science,
and Transportation, May 20, 1999.

Hello. My name is Peter Nickerson. I am the CEO and President of N2H2, Inc. in Seattle, Washington. N2H2 has provided server-based (network) Internet filtering services to schools, libraries, businesses and ISPs in the United States, Canada, the UK and Australia since 1995. Currently, over 6,000 schools in the United States use *Bess*®, our filtering service, in order to allow students access to the Internet with minimal supervision. N2H2 is the number one filtering solution in the education environment, and our presence in the library space is increasing steadily.

As you are all aware, it is hard to avoid the word "Columbine" when speaking of filtering these days. Perhaps the only positive effect of that terrible incident is increased awareness of the need to filter inappropriate content on the Internet. It is not my intention to reap the financial benefits of a disaster involving children, and for this reason N2H2 has chosen not to offer public statements about the connection between the incident and the Internet. Instead, we continue to focus our efforts on that which we do best. We monitor the Internet so that our customers don't have to. We have a staff of 75 people that do nothing but search the Web, looking for anything that may be inappropriate for kids – for my kids and your kids.

In the last 2 months, our review staff found an average of 36 URLs per day containing hate related material. Material that, while not containing gruesome images, is still very dangerous for young developing minds. We find approximately 250 gun-related URLs each day, and over 80 URLs a day containing violent images and text.

Senator McCain and Lieberman bi-lined an article in the May 12th edition of the *New York Times* saying that it is "unethical and unacceptable" of the entertainment industry to aim adult-rated movies and video games with high dosages of murder and mayhem at young teen-agers. The face of the Internet is no different. But unlike movies, the Internet has no consistent rating system for kids. Unfiltered Internet makes inappropriate material easily accessible for children, making Internet filtering even more necessary.

A general perception exists that Internet filtering is seriously flawed and in many situations unusable. It is also perceived that schools and libraries don't want filtering. These notions are naïve and based largely on problems associated with early versions of client-based software that were admittedly crude and ineffective. Though some poor filtering products still exist, filtering has gone through an extensive evolution and is not only good at protecting children but also well-received and in high demand.

N2H2 has met that demand with a high quality filtering solution, *Bess*. *Bess* is a service rather than a software product. N2H2 provides schools with a filtering and caching server (or for small schools, access to one) and completely maintains and services the filtering functions for the customer. This approach has proved invaluable to many schools who are short-handed in the technical area and may not have the resources to learn and maintain new hardware and software systems.

The services are adaptable to the customer's needs and community standards regarding filtering. The following is a partial list of the features and options that schools receive when they decide to use filtering. It is important to note that this is the array of options that schools have asked to see and which make the filtering service attractive and functional for them.

- The service is turnkey—All hardware, software, maintenance, and updates are included.
- Filtering is fully customizable—Customers choose the categories of sites they want blocked on their system. Choices include pornography, drug use, graphic violence, and bomb-making. (See the attached list for a complete description of the categories). Customers can also invoke exceptions for educational sites and choose whether or not to block free e-mail, chat or simply allow moderated chat.
- Customers can customize the filters by adding/subtracting URLs from block lists.
- Different filtering schemes can be set up for different times of day.
- Over 8 million web pages are contained in the block-site categories.
- All sites are reviewed by N2H2 staff before being added to the block lists.
- When users think that a site should not be blocked (or should be blocked), they can easily notify N2H2 staff and a review usually takes place within a day.
- Updates to the block lists occur daily, automatically.
- Technical support and system monitoring is available 24 hours a day.
- Adults can override the filters using passwords.
- Administrators get complete statistics on their network's Internet use on demand.
- Upgrades to the software are automatic.

These features allow communities to customize their filtering to fit their needs. It is probable that none of our customers configure their systems the same, and it is notable for the legislation being considered that some schools choose not to install the filter override option. Adults who want to access filtered sites need to do so off of the school's network.

While the K-12 environment is readily adopting Internet filtering without the added pressure of a legislative mandate, the same is not true of libraries. Some libraries do have various forms of Internet filtering on their computers. Our observation is that most do not. Filtering in the library environment is more complicated and much more tied to legitimate free-speech issues than in schools. Some librarians are adamantly opposed to filtering on First Amendment grounds. Those who are not are worried about litigation or the threat of litigation and have resisted the urge to filter. The demand for filtering in libraries is relatively low and will probably remain so until the courts resolve the extent to which librarians can filter.

The legislation before Congress deals with the filtering of sites that 1) are obscene, sites that 2) contain child pornography, and sites that contain 3) material deemed "inappropriate" for children. Obscenity, which includes pornographic material, and child pornography are illegal, and filtering that material should not be questionable. Unfortunately, a vast majority of sites that are "inappropriate" for children are legal, which makes them accessible and even more dangerous to children.

N2H2 feels that a child's exposure to hate and violent material should be accompanied by adult supervision. In that particular situation, the child is able to ask questions and receive information from both sides. Only in that situation can a developing mind make educated decisions about opinions and positions.

Lastly, Congress needs to be aware that the different forms of legislation appearing before them may not have a significant impact on promoting filtering. Most school and library administrators understand the need for some protection for children and are trying to deal with the problem, even without legislation. Because filtering is not free (list prices can range from $0.50 to $3.00 per workstation per month) this legislation could slowdown the adoption of Internet use in schools. If Congress wants to accelerate adoption of filtering, the e-rate funding program might be changed to include filtering.

History on N2H2

By the end of 1998, as many as 50 percent or more of K-12 students using the Internet in schools in Texas, Ohio, Washington, Maine, Oklahoma and Tennessee accessed the Internet through N2H2's filters. 50 schools in the Department of Defense's European school system use N2H2's *Bess* filtering. In addition to school services, N2H2 provides filtering to dozens of public libraries, businesses and almost 200 Internet Service Providers who provide the service to their dial-up customers. While N2H2 services have historically been provided on a network-wide basis, these relationships with ISPs and recent partnerships with companies like Netwave, Fortress, and Winstar enable individual computers (home users) to access N2H2 services.